

## **SYNOPSYS' PROPOSED JURY INSTRUCTIONS<sup>1</sup>**

### **PRELIMINARY JURY INSTRUCTIONS**

#### **No. 3 - Claims and defenses**

To help you follow the evidence, I will give you a brief review of the parties in this action and their positions:

This is an action for patent infringement. The patentee is Mentor Graphics Corporation, which I will refer to as "Mentor Graphics." The parties accused of infringement are Synopsys, Inc., EVE-USA, Inc., and Synopsys Emulation and Verification S.A. I will generally refer to the defendants collectively as "Synopsys." At time I may use the name EVE to refer to EVE-USA, Inc. and Synopsys Emulation and Verification S.A. separately from Synopsys, Inc. Both Mentor Graphics and Synopsys sell emulation systems for testing the circuit designs of semiconductor chips.

Mentor Graphics is the owner of U.S. Patent No. 6,240,376. I may refer to this patent as "the '376 patent," "the Mentor Graphics patent," "the asserted patent," or "the patent-in-suit."

The '376 patent was filed on July 31, 1998, and granted by the PTO on May 29, 2001. The '376 patent lists Alain Raynaud and Luc Burgun as the inventors. The validity and enforceability of the '376 patent is not at issue in this trial. For purposes of this trial, you should assume that the '376 patent is valid and enforceable.

Mentor Graphics contends that certain **features of** Synopsys' emulation systems infringe claims 1, 24, 26, 27, and 28 of the '376 patent. These claims may be referred to collectively as the "asserted claims." The emulation systems at issue are ZeBu-Server, ZeBu-Server 2, ZeBu-Server 3, and ZeBu-Blade. **The features of those systems that are at issue are flexible probes and value change probes.** The products with these features are generally referred to as the "accused products."

Mentor Graphics also contends that Synopsys has actively induced infringement of the asserted claims by others and/or contributed to the infringement of the asserted claims by others.

Synopsys denies that it infringes, directly or indirectly, any of Mentor Graphics' asserted claims.

You will be asked to determine the issue of infringement according to instructions I will give.

Source: Ninth Circuit Model Jury Instruction 1.2 (as revised); Federal Circuit Model Jury Instruction A.2 (as revised).

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<sup>1</sup> Proposed new language is in **bold** font.

## **PRELIMINARY JURY INSTRUCTIONS**

### **No. 5 – Preponderance of the Evidence**

In any legal action, facts must be proven by a required standard of evidence, known as the “burden of proof.”

Mentor Graphics must prove its claim of patent infringement and any available money damages by a preponderance of the evidence. When a party has the burden of proof by a preponderance of the evidence, it means that you must be persuaded that what the party seeks to prove is more probably true than not true. To put it differently, if you were to put Mentor Graphics’ and Synopsys’ evidence on opposite sides of a scale, the evidence supporting Mentor Graphics’ assertions would have to tip the scale, in Mentor Graphics’ favor.

After the opening statements, Mentor Graphics will present its evidence in support of its contention that the asserted claims of the ’376 patent have been and continue to be infringed by Synopsys. To prove infringement of any claim, Mentor Graphics must persuade you that it is more likely than not that Synopsys has infringed that claim.

Synopsys will present evidence responding to Mentor Graphics’ proof of infringement.

Source: Court’s Draft Preliminary Instruction (modified to remove reference to willfulness)

## **PRELIMINARY JURY INSTRUCTIONS**

### **New Instruction No. 5A - Burden of Proof - Clear and convincing evidence**

When a party has the burden of proving any claim or defense by clear and convincing evidence, it means you must be persuaded by the evidence that the claim or defense is highly probable. This is a higher standard of proof than proof by a preponderance of the evidence.

You should base your decision on all of the evidence, regardless of which party presented it.

#### **Authority:**

Ninth Circuit Model Jury Instruction 1.4 (2007).

## **PRELIMINARY JURY INSTRUCTIONS**

### **New Instruction No. 6A - Testimony of a Corporate Representative**

You have heard the testimony of a corporate representative. When a corporation receives a notice or subpoena to testify, it must designate one or more officers, directors, or managing agents who consent to testify on the corporation's behalf; and it may set out the matters on which each person designated will testify. The persons designated must testify about information known or reasonably available to the organization. The testimony of the designated corporate representative binds the corporation on the matters on which the corporate representative has been designated to testify.

#### Authorities:

*See Fed. R. Civ. P. 30(b)(6); Federal Jury Practice And Instructions (6th ed. 2011) § 103:31 (consideration of the evidence--Corporate party's agents and employees); HTI Holdings, Inc. v. Hartford Cas. Ins. Co., No. 10-cv-06021-TC, 2011 WL 4595799 (Aug. 24, 2011) (“as Hartford's 30(b)(6) witness, Pawloski's testimony is both admissible and binding”); Sigmund v. Starwood Urban Retail VI, LLC, 236 F.R.D. 43, 44-45, 47 (D.D.C. 2006) (stating that, under Rule 30(b)(6), designated witness' testimony is a “statement of the corporation” and “binding on the company”).*

## **FINAL JURY INSTRUCTIONS**

### **New Instruction No. 6A - Failure to call available witness**

If a party fails to call a person as a witness who has knowledge about the facts in issue, and who is reasonably available to the party, and who is not equally available to the other party, then you may infer that the testimony of that person is unfavorable to the party who could have called the witness and did not.

Authority:

Federal Jury Practice And Instructions (6th ed. 2011) § 104:25

## **FINAL JURY INSTRUCTIONS**

### **No. 7 – Summary of Contentions**

As I did at the start of the case, I will first give you a summary of each side's contentions in this case. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

As I previously told you, Mentor Graphics contends that Synopsys infringes the '376 patent. The asserted claims of the '376 patent are: 1, 24, 26, 27, and 28. Mentor Graphics also argues that Synopsys has actively induced direct infringement of these claims of the '376 patent by others, and has contributed to the direct infringement of these claims of the '376 patent by others. **The features that are alleged to infringe are the flexible probe and value change probe features** of the following emulation systems: ZeBu-Server, ZeBu-Server 2, ZeBu-Server 3, and ZeBu-Blade.

Synopsys denies that it has infringed the asserted claims of the '376 patent and denies that it has induced or contributed to any direct infringement of the '376 patent. **Synopsys contends that its accused ZeBu emulation systems do not infringe the '376 patent because neither Synopsys nor its customers perform every step of claims 1, 24, 26, and 27 of the '376 patent and its accused ZeBu emulation systems do not meet all the elements of claim 28 of the '376 patent.**

Your job is to decide whether Synopsys has infringed the asserted claims of the '376 patent. If you decide that any claim of the '376 patent has been infringed, you will then need to decide any money damages to be awarded to Mentor Graphics to compensate it for the infringement.

Source: Federal Circuit Model Jury Instruction B.1 (as revised).

## FINAL JURY INSTRUCTIONS

### No. 13 – Direct Infringement

In order to prove direct infringement of method claims 1, 24, 26, and 27, Mentor Graphics must prove by a preponderance of the evidence, *i.e.*, that it is more likely than not, that Synopsys performed every step of the asserted claim and did so without the permission of Mentor Graphics after October 4, 2012. **In this case, Mentor Graphics contends that the use of flexible probes and value change probes is infringing, so Mentor must prove by a preponderance of the evidence that the use of flexible probes or value change probes meet each and every element of an asserted claim.**

In order to prove direct infringement of claim 28, Mentor Graphics must prove by a preponderance of the evidence, *i.e.*, that it is more likely than not, that Synopsys made, used, sold, offered for sale within, or imported into the United States a product that meets all the limitations of claim 28. **In this case, Mentor Graphics contends that flexible probes and value change probes are infringing, so Mentor Graphics must prove by a preponderance of the evidence that the use or sale of ZeBu emulation systems using flexible probes or value change probes meets each and every element of an asserted claim.**

You must determine, separately for each asserted claim, whether or not there is infringement. There is one exception to this rule. If you find that a claim on which other claims depend is not infringed, there cannot be infringement of any dependent claim that refers directly or indirectly to that independent claim. On the other hand, if you find that an independent claim has been infringed, you must still decide, separately, whether the additional requirements of any claims that depend from the independent claim are met, thus, whether those claims have also been infringed.

#### Authorities

*Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1316, n.1 (Fed. Cir. 2006) (dependent claims not infringed when independent claim not infringed); *MicroStrategy Inc. v. Bus. Objects, S.A.*, 429 F.3d 1344, 1352-53 (Fed. Cir. 2005) (no literal infringement where accused product did not contain every element of the claim); *Cross Med. Prods. v. Medtronic Sofamor Danek*, 424 F.3d 1293, 1309-11 (Fed. Cir. 2005) (no direct infringement where accused product did not include each claim limitation); *Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1353-54 (Fed. Cir. 2001) (no literal infringement where all of the elements of the claim not present in the accused system); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261 (Fed. Cir. 1986) (affirming finding of direct infringement based on circumstantial evidence).

Source: Federal Circuit Model Jury Instruction B.3.1A (as revised).

## FINAL JURY INSTRUCTIONS

### No. 16 – Willful Infringement

In this case, Mentor Graphics argues both that Synopsys infringed and, further, that Synopsys infringed willfully. If you have decided that Synopsys has infringed, you must then decide whether Mentor has proven, by clear and convincing evidence whether this infringement was willful. To establish that this infringement was willful, Mentor must prove, by clear and convincing evidence, that Synopsys acted recklessly.

To prove that Synopsys acted recklessly, Mentor Graphics must prove two things by clear and convincing evidence:

The first part of the test is objective: Mentor Graphics must prove that Synopsys acted despite a high likelihood that Synopsys' actions infringed a valid and enforceable patent. In making this determination, you may not consider Synopsys' state of mind. Legitimate or credible defenses to infringement, even if not ultimately successful, demonstrate a lack of recklessness. **Ordinarily, willfulness will depend on conduct before the filing of the lawsuit, so the focus of your inquiry should be on Synopsys' conduct prior to September 27, 2012, when this lawsuit began. In determining whether Mentor Graphics is entitled to willfulness damages, you may also consider that Mentor did not seek to stop any alleged infringement immediately by asking for an injunction to halt the sales of ZeBu.**

Only if you conclude that the Synopsys' conduct was reckless do you need to consider the second part of the test. The second part of the test does depend on Synopsys' state of mind. Mentor Graphics must persuade you that Synopsys actually knew or should have known that its actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent.

To determine whether Synopsys had this state of mind, consider all facts which may include, but are not limited, to:

- (1) Whether or not Synopsys acted in accordance with the standards of commerce for its industry;
- (2) Whether or not Synopsys intentionally copied a product of Mentor Graphics that is covered by the Mentor Graphics' patent;
- (3) Whether or not there is a reasonable basis to believe that Synopsys did not infringe or had a reasonable defense to infringement;
- (4) Whether or not Synopsys made a good-faith effort to avoid infringing '376 patent, for example, whether Synopsys attempted to design around the asserted patent; and
- (5) Whether or not Synopsys tried to cover up its infringement.

#### Authorities

35 U.S.C. § 284; *In re Seagate Tech., LLC*, 497 F.3d 1360 (Fed. Cir. 2007) (standard for finding willfulness); *Knorr-Bremse v. Dana Corp.*, 383 F.3d 1337 (Fed. Cir. 2004) (en banc) (opinion of counsel defense); *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1346 (Fed. Cir. 2001) (burden of proof for willfulness); *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1354 (Fed. Cir. 1999) (knowledge of the patent necessary to show

willfulness); Read Corp. v. Portec, Inc., 970 F.2d 816 (Fed. Cir. 1992) (identifying factors that may show willfulness); Gustafson, Inc. v. Intersystems Indus. Prods., Inc., 897 F.2d 508, 510 (Fed. Cir. 1990) (history of Federal Circuit decisions on willfulness).

Source: Federal Circuit Model Jury Instruction B.3.10 (as revised); In re Seagate Tech., LLC, 497 F.3d 1360 (Fed. Cir. 2007).

## FINAL JURY INSTRUCTIONS

### No. 17 – Damages Generally

If you find that Synopsys infringed any asserted claim of the '376 patent, you must then consider what amount of damages to award to Mentor Graphics. I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win this case.

The damages you award must be adequate to compensate Mentor Graphics for the infringement. They are not meant to punish Synopsys. While Mentor Graphics is not required to prove its damages with mathematical precision, it must prove them with reasonable certainty. Mentor Graphics has the burden to persuade you of the amount of its damages by a preponderance of the evidence. Your damages award should put Mentor Graphics in approximately the same financial position that it would have been in had the infringement not occurred. You should not award damages that are remote or speculative.

There are different types of damages that Mentor Graphics may be entitled to recover. In this case, Mentor Graphics seeks a reasonable royalty. A reasonable royalty is defined as the money amount Mentor Graphics and Synopsys would have agreed upon as a fee for use of the invention before infringement began.

I will give more detailed instructions regarding damages shortly. Note, however, that Mentor Graphics is entitled to at least a reasonable royalty for each sale of an infringing emulation system.

#### Authorities

*See 35 U.S.C. § 284; Dow Chem. Co. v. Mee Indus., Inc.*, 341 F.3d 1370, 1381-82 (Fed. Cir. 2003); *Integra Lifesciences I, Ltd. v. Merck KGaA*, 331 F.3d 860, 870 (Fed. Cir. 2003); *Grain Processing Corp. v. Am. Maize-Props. Co.*, 185 F.3d 1341, 1349 (Fed. Cir. 1999); *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1108-09 (Fed. Cir. 1996); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (en banc); *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983).

Source: Federal Circuit Model Jury Instruction B.6.1 (as revised), Northern District of California Model Jury Instruction B.5.1 (as revised).

## **FINAL JURY INSTRUCTIONS**

### **No. 18 – “But For” Test**

In this case, Mentor Graphics seeks to recover lost profits for some of Synopsys’ sales of Synopsys’ emulation systems and a reasonable royalty on the rest of Synopsys’ sales.

To recover lost profits (as opposed to reasonable royalties), Mentor Graphics must show a causal relationship between the infringement and Mentor Graphics’ loss of profit. In other words, Mentor Graphics must show that, but for the infringement, there is a reasonable probability that Mentor Graphics would have earned higher profits. To show this, Mentor Graphics must prove that, if there had been no infringement, it would have made some portion of the sales that Synopsys made of the infringing product, and it would have sold more products that are functionally related to those products.

Although to prove lost profits Mentor Graphics must make a hypothetical reconstruction of the market to project economic results that did not in fact occur, the hypothetical reconstruction may not be based on speculation. In other words, Mentor Graphics must present sound economic proof of the nature of the hypothetical market and what would have occurred if Synopsys were not in the market.

Mentor Graphics is entitled to lost profits if it establishes each of the following:

- (1) That there was a demand for the patented feature.
- (2) That there were no available, acceptable, noninfringing substitute products. Or, if there were acceptable, noninfringing substitute products, Mentor Graphics must establish the number of the Synopsys’ sales that Mentor Graphics would have made (in terms of market share), despite the availability of other acceptable noninfringing substitutes.
- (3) That Mentor Graphics had the manufacturing and marketing capacity to make any infringing sales actually made by Synopsys and for which Mentor Graphics seeks an award of lost profits—in other words, that Mentor Graphics was capable of satisfying the demand.
- (4) The amount of profit that Mentor Graphics would have made if Synopsys had not infringed.

#### Authorities

35 U.S.C. § 284; *Aro Mfg. Co. v. Convertible Top Co.*, 377 U.S. 476, 502-07 (1964); *Ericsson, Inc. v. Harris Corp.*, 352 F.3d 1369, 1377-79 (Fed. Cir. 2003); *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1123 (Fed. Cir. 2003); *Gargoyles, Inc. v. United States*, 113 F.3d 1572, 1577-78 (Fed. Cir. 1997); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (en banc); *BIC Leisure Prods., Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1218-19 (Fed. Cir. 1993); *Carella v. Starlight Archery*, 804 F.2d 135, 141 (Fed. Cir. 1986); *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 552 (Fed. Cir. 1984); *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978); *Grain Processing Corp. v. Am. Maize-Props. Co.*, 185 F.3d 1341, 1350 (Fed. Cir. 1999).

Source: Federal Circuit Bar Association Model Jury Instruction 6.2.

## FINAL JURY INSTRUCTIONS

### No. 19 – Lost Profits – Demand

Demand for the patented product can be proven by **significant sales of a patent holder's patented product or significant sales of an infringing product containing the patented features.**

#### Authorities

*DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1330 (Fed. Cir. 2009).

Source: Federal Circuit Bar Association Model Jury Instruction 6.2.

## **FINAL JURY INSTRUCTIONS**

### **No. 23 – Lost Profits – Market Share**

If Mentor Graphics establishes it would have made some, but not all, of Synopsys' sales but for the infringement, the amount of sales that Mentor Graphics lost may be shown by proving Mentor Graphics' share of the relevant market, excluding infringing products. Mentor Graphics may be awarded a share of profits equal to its market share even if there were noninfringing substitutes available. In determining Mentor Graphics' market share, the market must be established first, which requires determining which products are in that market. Products are considered in the same market if they are considered "sufficiently similar" to compete against each other. Two products are sufficiently similar if one does not have a significantly higher price than, or possess characteristics significantly different from, the other.

**In this case, Mentor Graphics seeks lost profits based only on its market share for every customer other than Intel. For every customer other than Intel, Mentor Graphics contends that the market included at least the following suppliers: Mentor Graphics, Synopsys, and Cadence. For Intel, Mentor Graphics contends that there were only two suppliers: Mentor Graphics and Synopsys. Mentor Graphics contends that it is entitled to lost profits for 100% of the sales Synopsys made to Intel and not just lost profits based on its market share in the overall emulation market that it seeks for other customers. Synopsys disagrees and contends that the same market exists for all customers, including Intel.**

**Mentor Graphics bears the burden to show that Mentor Graphics and Synopsys were the only emulation suppliers for Intel, and that Intel would not have purchased emulators from another supplier such as Cadence if Synopsys could not sell ZeBu products. To prove this, Mentor must show that Palladium was not an alternative to Veloce or ZeBu because it had disparately different prices of significantly different characteristics.**

#### Authorities

*State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1557 (Fed. Cir. 1989); *BIC Leisure Prods., Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1218-19 (Fed. Cir. 1993); *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1124 (Fed. Cir. 2003); *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1354-55 (Fed. Cir. 2001).

## FINAL JURY INSTRUCTIONS

### No. 24 – Lost Profits – Collateral Sales

In this case, Mentor Graphics is seeking lost profits from sales of service agreements, which Mentor Graphics contends it would have sold along with its emulation system that competes with Synopsys' infringing emulation systems. These service agreements sold with Mentor Graphics' emulation systems are called collateral products.

To recover lost profits on sales of such collateral products, Mentor Graphics must establish two things. First, Mentor Graphics must establish it is more likely than not that Mentor Graphics would have sold the collateral products (the service agreements) but for the infringement. Second, **a collateral product and the competitive product together must be like components of a single assembly or parts of a complete machine, or, in other words, they must constitute a single functional unit.**

**Recovery for lost profits on sales of collateral products must not include items that essentially have no functional relationship to the competitive product and that have been sold with the competitive product only as a matter of convenience or business advantage. You may not award patent damages for sales of items or services that are neither competitive with nor function with the patented invention.**

#### Authorities

*Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1550 (Fed. Cir. 1995) (en banc) (denying recovery for lost profits on collateral sales where nonpatented product lacked a functional relationship to the patented product); *see also State Indus., Inc. v. Mar-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989); *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1157-58 (6th Cir. 1978).

Source: Federal Circuit Model Jury Instruction B.6.3 (as revised).

## **FINAL JURY INSTRUCTIONS**

### **New Instruction No. 24A – Lost Profits – Entire Market Value Exception and Apportionment**

If Mentor Graphics proves that it is entitled to lost profits, Mentor Graphics can prove the amount of its lost profits damages in one of two ways. It can attempt to prove that it is entitled to the entire value of the emulator under the “entire market value exception.” If it cannot prove that it is entitled to the entire value of the emulator, it must apportion between the value of the ’376 patent compared to unpatented features or features covered by patents not at issue here, as discussed below.

#### Entire Market Value Exception

When claims are drawn to an individual component of a multi-component product, it is the exception, not the rule, that damages may be based upon the value of the multi-component product. Mentor Graphics may recover damages based on the entire market value of the accused product only where the patented feature creates *the* basis for customer demand. It is not enough to merely show that the ’376 patented feature is viewed as valuable, important, or even essential to the use of the emulator. The requirements of the entire market value exception are strict to ensure that a damages award does not overreach and encompass components not covered by the patent.

In determining Mentor’s lost profits award, you should not use the value of the entire emulator unless you can find:

- (1) the accused infringing features (flexible probes and value change probes) creates the basis for customers’ purchase of the accused product;
- (2) the sales were made in a two-supplier market;
- (3) there are no non-infringing alternatives;
- (4) Mentor had capacity to meet the needs of increased demand, and
- (5) the amount of profit that Mentor would have made.

#### Apportionment

If Mentor Graphics cannot prove that it is entitled to the entire market value of the emulator, Mentor Graphics must give evidence to separate or apportion Synopsys’ profits and Mentor Graphics’ damages between the patented features and the unpatented features of the emulators at issue. Unpatented components should not be included in a damages computation unless the patentee can show that they are functionally dependent on each other.

#### Authorities

*VirnetX, Inc. v. Cisco Sys., Inc.*, --- F.3d ---, 2014 WL 4548722 (Fed. Cir. Sept. 16, 2014); *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67–68 (Fed. Cir. 2012); *Mentor Graphics Corp. v. EVE-USA, Inc.*, No. 3:10-cv-00954-MO (Lead) (D. Or. Aug. 19, 2014), Dkt. No. 589 (granting Synopsys’ motion for summary judgment that Mentor must apportion lost profits and has failed to do so); *Garretson v. Clark*, 111 U.S. 120, 121-22 (1884); *Ferguson Beauregard v. Mega Sys.*, 350 F.3d 1327 (Fed. Cir. 2003); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538 (Fed. Cir. 1995) (en banc).